

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b))

Docket No.
MR/98-003.C

In Re Application Of: REISKER et al.

SEP 22 2003

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S Davis
10/2/03

Serial No.
10/068,300

Filing Date
February 5, 2002

Examiner
Brij B. Shrivastav

Group Art Unit
2859

Title: COIL STRUCTURE WITH TAPERED MEMBERS FOR IMPROVED HOMOGENEITY IN MRI

Address to:

Assistant Commissioner for Patents
Washington, D.C. 20231

37 CFR 1.97(b)

- The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

37 CFR 1.97(c)

- The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:

the statement specified in 37 CFR 1.97(e);

OR

the fee set forth in 37 CFR 1.17(p).

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
(Under 37 CFR 1.97(b) or 1.97(d))

Docket No.
MR/98-003.C

In Re Application: REISKER et al.

SEP 22 2003

Serial No.

10/068,300

Filing Date

February 5, 2002

Examiner

Brij B. Shrivastav

Group Art Unit

2859

COIL STRUCTURE WITH TAPERED MEMBERS FOR IMPROVED HOMOGENEITY IN MRI

Payment of Fee

(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

A check in the amount of _____ is attached.

The Assistant Commissioner is hereby authorized to charge and credit Deposit Account No. _____ as described below. A duplicate copy of this sheet is enclosed.

Charge the amount of _____.

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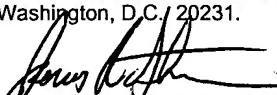
(Date)

Signature

Typed or Printed Name of Person Signing Certificate

Certificate of Mailing by First Class Mail

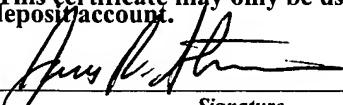
I certify that this document and fee is being deposited 9/16/2003 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.


Signature of Person Mailing Correspondence

James R. Stevenson

Typed or Printed Name of Person Mailing Certificate

*This certificate may only be used if paying by deposit account.


Signature

James R. Stevenson

MEDRAD, INC.

One Medrad Drive

Indianola, PA 15051

Dated: September 16, 2003

CC:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re Application of:) Group Art Unit: 2859
)
 REISKER et al.)
)
 Filed: February 5, 2002) Examiner: SHRIVASTAV, Brij B.
)
 Serial No.: 10/068,300)
)
 Confirmation No. 9757) Docket No.: MR/98-003.C
)
 For: COIL STRUCTURE WITH TAPERED)
 MEMBERS FOR IMPROVED)
 HOMOGENEITY IN MRI) Date: September 16, 2003

COMMISSIONER FOR PATENTS
P.O. Box 1450
ALEXANDRIA, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants hereby submit this *Information Disclosure Statement* (IDS) to comply with the duty of disclosure as codified in 37 C.F.R. §1.56. Submitted before the mailing of a first Office Action on the merits, this IDS is thus filed in accordance with 37 C.F.R. §1.97(b)(3). This IDS contains, and/or is accompanied by, the information required by 37 C.F.R. §1.98.

Applicants respectfully ask the Examiner to consider in detail each of the references listed on FORMS PTO-1449 (attached hereto), and to enter the same into the record of this application for patent. Most of the references cited on the attached FORMS PTO-1449 were disclosed and/or made of record in the parent application for parent, namely, U.S. Application Serial No: 09/449,256, now issued as U.S. Patent 6,344,745, and copies thereof may be found in the corresponding application files.

Items AZ and BL, however, constitute new references for which Applicants now seek the Examiner's consideration. The Examiner is respectfully requested to consider these two references and all of the other references fully, and to independently ascertain their teachings and relevance to the pending application.

Listed below are the two new references listed as Items AZ and BL in the attached FORMS PTO-1449:

1. Item AZ is an abstract allegedly published at a tradeshow (hereinafter the "*Adriany Abstract*") - {*Adriany, G. et al., "A TRANSMIT/RECEIVE QUADRATURE BIRDCAGE ARRAY COIL FOR 4 TESLA," Proceedings of the International Society for Magnetic Resonance in Medicine, Fifth Scientific Meeting and Exhibition, vol. 1, p. 177 (April 12-18, 1997).*}
2. Item BL is a presentation allegedly given at a tradeshow (hereinafter the "*Adriany Presentation*") - {*Adriany, G. et al., "A TRANSMIT/RECEIVE QUADRATURE BIRDCAGE ARRAY FOR 4 TESLA," Presentation to the International Society for Magnetic Resonance in Medicine, Fifth Scientific Meeting and Exhibition, Vancouver, B.C., Canada (April 12-18, 1997).*}

Applicants advise the Examiner that they are not sure whether Items AZ and BL even qualify as proper references under 35 U.S.C. §102(a). Applicants therefore reserve the right to contest whether these references constitute prior art.

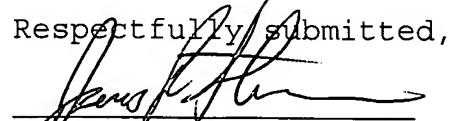
Neither the *Adriany Abstract* nor the *Adriany Presentation* disclose the invention claimed in the present application. First, these references disclose a phased array head coil for a 4 Tesla magnetic resonance imaging (MRI) system. This two-element head coil array is comprised of a standard cylindrical birdcage that

partially overlaps a second non-cylindrical birdcage coil. The coil of Applicants' claims, in contrast, is a single-element coil.

Second, neither the Adriany Abstract nor the Adriany Presentation disclose the use of conductive rods that have both linear and tapered portions. As best shown in the Adriany Presentation (see p. 7), the cylindrical birdcage element (i.e., "coil 1") has only straight conductive rods, and the non-cylindrical birdcage element has only curved conductive rods. In fact, neither reference even makes any mention of the benefit of such rod construction. More significantly, nowhere in either reference does Adriany disclose the benefits of using, in the context of a either single coil or even a phased array coil, conductive rods having linear and tapered portions.

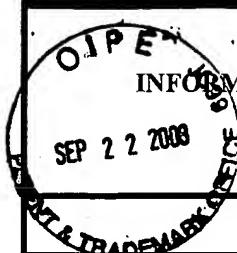
Applicants respectfully request the Examiner to initial copies of the attached FORMS PTO-1449 as evidence that he considered each of the references cited therein, and to return the initialed forms to the undersigned counsel.

If the Examiner has any questions regarding this IDS, he is invited to call the undersigned at the number listed below.

Respectfully submitted,


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INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Docket Number (Optional)	Application Number
MR/98	10/068,300
Applicant(s)	REISKER et al.
Filing Date	Group Art Unit
2/5/2002	2859

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,634,980	1/6/1987	Misic et al.			
	AB	4,684,895	8/4/1987	Misic et al.			
	AC	4,692,705	9/8/1987	Hayes			
	AD	4,731,584	3/15/1988	Misic et al.			
	AE	4,740,751	4/26/1988	Misic et al.			
	AF	4,764,726	8/16/1988	Misic et al.			
	AG	4,793,356	12/27/1998	Misic et al.			
	AH	4,797,617	1/10/1989	Misic et al.			
	AI	4,825,162	4/25/1989	Roemer et al.			
	AJ	4,839,594	6/13/1989	Misic et al.			
	AK	4,841,248	6/20/1989	Mehdizadeh et al.			

FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AL	Lin et al., <i>Magnetic Resonance in Medicine</i> , "A Novel Multi-Segment Surface Coil for Neuro-Functional Magnetic Resonance Imaging," Vol. 39, pp. 164-168 (1998).
AM	Meyer et al., <i>Journal of Magnetic Resonance, Series B</i> , "A 3x3 Mesh Two-Dimensional Ladder Network Resonator of MRI of the Human Head," Vol. 107, pp. 19-24 (1995).

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

O.I.P.S.
INFORMATION DISCLOSURE CITATION

SEP 22 2003

(Use several sheets if necessary)

ATTY DOCKET NO.

MR/98

SERIAL NO.

10/068,300

REISKER et al.

FILING

2/5/2002

GROUP

2859

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AN	4,879,516	11/7/1989	Mehdizadeh et al.			
	AO	4,881,034	11/14/1989	Kaufman et al.			
	AP	4,920,318	4/24/1990	Misic et al.			
	AQ	4,975,644	12/4/1990	Fox			
	AR	5,136,244	8/4/1992	Jones et al.			
	AS	5,196,796	3/23/1993	Misic et al.			
	AT	5,209,233	5/11/1993	Holland et al.			
	AU	5,256,971	10/26/1993	Boskamp			
	AV	5,258,717	11/2/1993	Misic et al.			
	AW	5,315,251	5/24/1994	Derby			
	AX	5,348,010	9/20/1994	Schnall et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AY	Roemer et al., <i>Magnetic Resonance in Medicine</i> , "The NMR Phased Array," Vol. 16, pp. 192-225 (1990).
	AZ	Adriany, G. et al., "A Transmit/Receive Quadrature Birdcage Array Coil for 4 Tesla," <i>Proceedings of the International Society for Magnetic Resonance in Medicine</i> , Fifth Scientific Meeting and Exhibition, Vol. 1, p. 177 (April 12-18, 1997).

EXAMINER

DATE CONSIDERED

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INFORMATION DISCLOSURE CITATION <small>(Use several sheets if necessary)</small>				ATTY DOCKET NO. MR/98	SERIAL NO. 10/068,300	
REISKER et al.				FILING 2/5/2002	GROUP 2859	
U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
BA	5,355,087	10/11/1994	Claiborne et al.			
BB	5,517,120	5/14/1996	Misic et al.			
BC	5,521,506	5/28/1996	Misic et al.			
BD	5,602,479	2/11/1997	Srinivasan et al.			
BE	5,610,520	3/11/1997	Misic			
BF	5,998,999	12/7/1999	Richard et al.			
BG	6,040,697	3/21/2000	Misic			
BH	6,051,974	4/18/2000	Reisker et al.			
BI	6,100,691	8/8/2000	Yeung			
BJ	6,177,797	1/23/2001	Srinivasan			
BK	6,223,065	1/24/2001	Misic et al.			
FOREIGN PATENT DOCUMENTS						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES
						NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)						
	BL	Adriany, G. et al., "A Transmit/Receive Quadrature Birdcage Array Coil for 4 Tesla," Presentation of the International Society for Magnetic Resonance in Medicine, Fifth Scientific Meeting and Exhibition, Vancouver, B. C., Canada (April 12-18, 1997).				
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